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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/624,820	07/25/2000	Michael Francis Dube	JJ-124B-R &D	7464

7590 12/10/2002

Grover M. Myers, Law Department Patents
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Winston-Salem, NC 27102-1487

EXAMINER

WALLS, DIONNE A

ART UNIT	PAPER NUMBER
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1731

DATE MAILED: 12/10/2002

8

Please find below and/or attached an Office communication concerning this application or proceeding.

mk-8

Office Action Summary

Application No.

09/624,820

Applicant(s)

DUBE ET AL.

Examiner

Dionne A. Walls

Art Unit

1731

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 October 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 10-12, 14, 25 and 26 is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-9, 12 and 15-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-4, 6-9, 13 and 23-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anwar et al (US. Pat. No. 3,618,588) in view of Richards (US. Pat. No. 5,454,874) and the *Encyclopedia of Food Science Technology and Nutrition* ("EFSFTN").

Anwar et al discloses a process for manufacturing caramel color which comprises heating the juice from fruit, which contains levulose (corresponding to the claimed "fructose/reducing sugar"), in the presence of a catalyst, which may be employed in the amount of between about 4 and about 20 percent (corresponding to the claimed "less than about 30 weight percent/about .5 – 10 weight percent), and which can be chosen from an alkali catalyst, such as sodium hydroxide, under temperatures preferably ranging from about 222 – 350 degrees F (which is 105-176 degrees C) (see cols. 1-2). It would have been obvious to one having ordinary skill in the art at the time of the invention to have selected a temperature of at least 150 or 175 degrees C for the heating process since this temperature is in the range envisioned by Anwar et al to be a suitable temperature under which to carry out the caramelization process. The caramelization process is also carried out under a pressure of between about 10-60

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psig (corresponding to the claimed "20 psig – 500 psig") for a time period of between about 2-12 hrs (corresponding to the claimed "period of at least about 10 minutes").

While Anwar et al may not specifically state that an *aqueous* mixture of the reducing sugar is subjected to heat treatment during the caramelization process, it does state that the juice of the fruit is added to catalyst and subjected to the caramelization process, and said juice is likely to contain some water. However, if this is not the case, Richards discloses, in its "Background of Invention" section, that reducing sugars may be heated either dry or *with water* (alone or in the presence of a base) during the caramelization process (see col. 1, lines 21-25). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to provide an aqueous mixture of reducing sugar/fructose and catalyst to subject to caramelization because this is conventional practice in the practice of caramelizing as taught in Richards. While Anwar et al modified by Richards may not teach that the caramel can be applied to a tobacco leaf or cut filler so that a smoking article can be prepared, Anwar et al does state that the caramel color of its invention can be used where caramel is normally used as a coloring agent (col. 6, lines 35-40). Further, the EFSFTN discloses that caramel can be added to tobacco for coloring purposes (see page 661, 2nd column). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to add the caramel disclosed in Anwar et al modified by Richards et al onto tobacco since it is well-known in the tobacco art to do so, as evidenced by the EFSFTN. While it is not explicitly stated that a smoking article is prepared from this tobacco with

caramel additive, it would follow that such a product is ultimately prepared because tobacco is conventionally used as a filler for smoking articles.

Regarding claim 9, while the process of Anwar et al modified by Richards et al and the EFSFTN may not specifically disclose that the caramel composition is applied at an amount of from about 5% - 8% by weight based on the total dry weight of the tobacco, it would have been obvious to one having ordinary skill in the art at the time of the invention to arrive at this claimed range, after routine experimentation, in an effort to obtain an optimal and sufficient amount of caramel coloring for the tobacco material, while not adversely affecting the taste of the tobacco during smoking.

3. Claims 15-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anwar et al (US. Pat. No. 3,618,588) in view of the *Encyclopedia of Food Science Technology and Nutrition* ("EFSFTN").

Anwar et al discloses a process for manufacturing caramel color which comprises heating the juice of fruit, which contains levulose (corresponding to the claimed "fructose/reducing sugar"), in the presence of a catalyst, which may be employed in the amount of between about 4 and about 20 percent (corresponding to the claimed "less than about 30 weight percent/about .5 – 10 weight percent), and which can be chosen from an alkali catalyst, such as sodium hydroxide, under temperatures preferably ranging from about 222 – 350 degrees F (which is 105-176 degrees C) (see cols. 1-2). It would have been obvious to one having ordinary skill in the art at the time of the invention to have selected a temperature of at least 150 or 175 degrees C for the heating process since this temperature is in the range envisioned by Anwar et al to be a

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suitable temperature under which to carry out the caramelization process. The caramelization process is also carried out under a pressure of between about 10-60 psig (corresponding to the claimed "20 psig – 500 psig") for a time period of between about 2-12 hrs (corresponding to the claimed "period of at least about 10 minutes").

While Anwar et al may not teach that the caramel can be applied to a tobacco leaf or cut filler so that a smoking article can be prepared, Anwar et al does state that the caramel color of its invention can also be used where caramel is normally used as a coloring agent (col. 6, lines 35-40). Further, the EFSFTN discloses that caramel can be added to tobacco for coloring purposes (see page 661, 2nd column). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to add the caramel disclosed in Anwar et al modified by Richards et al onto tobacco since it is well-known in the tobacco art to do so, as evidenced by the EFSFTN. While it is not explicitly stated that a smoking article is prepared from this tobacco with caramel additive, it would follow that such a product is ultimately prepared because tobacco is conventionally used as a filler for smoking articles.

Allowable Subject Matter

4. Claims 10-13, 14, and 25-26 are allowed.
5. The following is an examiner's statement of reasons for allowance: While the prior art of record suggests a process wherein a mixture consisting essentially of a reducing sugar, namely fructose, and sodium hydroxide is subjected to caramelization conducted at at least about 150 degrees C, and then applied to a tobacco leaf material

and prepared into a smoking article, said art neither teaches nor suggest such a method wherein the reducing sugar is high fructose corn syrup.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Response to Arguments

6. Applicant's arguments with respect to claims 1-4, and 6-26 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

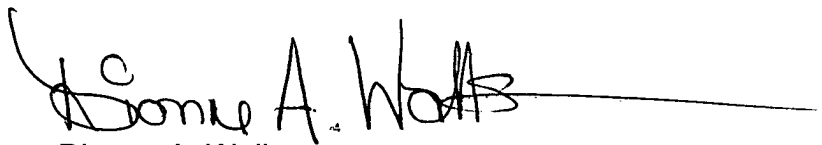
7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dionne A. Walls whose telephone number is (703) 305-0933. The examiner can normally be reached on Mon-Fri, 7AM - 4:30PM (Every other Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven P. Griffin can be reached on (703) 308-1164. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0661.


Dionne A. Walls
December 5, 2002


STEVEN P. GRIFFIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700